



1. An apparatus comprising:
an input waveguide for carrying an optical signal having a nominal
wavelength; and
an output waveguide having a Bragg grating disposed proximate to said
input waveguide, said Bragg grating having an adjusted grating
period that has been increased from a nominal grating period to
compensate for a Bragg wavelength shift.

2. The apparatus of claim 1 wherein said Bragg grating is
implemented as a uniform grating having means for applying a temperature
gradient to said uniform grating.

3. The apparatus of claim 1 wherein said Bragg grating is
implemented as a uniform grating having means for applying a strain gradient to
said uniform grating.

4. The apparatus of claim 1 wherein said Bragg grating has a higher
periodicity in its middle portion than in its outer portions.

5. The apparatus of claim 1 wherein said Bragg grating is an
apodized Bragg grating.

6. The apparatus of claim 1 wherein said Bragg grating has a variable
grating period.

7. A grating assisted direct coupler comprising:
an input waveguide carrying an optical signal having a nominal
wavelength;

an output waveguide having a variable period Bragg grating for coupling
said optical signal into said output waveguide, said variable period
Bragg grating having an adjusted variable grating period that has
been changed from a nominal variable grating period to
5 compensate for a Bragg wavelength shift.

8. The direct coupler of claim 7 further including means for applying
a temperature gradient to said variable period Bragg grating.

9. The direct coupler of claim 7 further including means for applying
a strain gradient to said variable period Bragg grating.

10 10. The direct coupler of claim 7 wherein said variable period Bragg
grating has a higher periodicity in its middle portion than in its outer portions.

11. The direct coupler of claim 7 wherein said variable period Bragg
grating is an apodized Bragg grating.

15 12. A method for compensating for a Bragg wavelength shift in a
grating assisted direct coupler having an input waveguide and an output
waveguide, said output waveguide having a Bragg grating formed thereon, the
method comprising applying a temperature gradient to said Bragg grating.

20 13. A method for compensating for a Bragg wavelength shift in a
grating assisted direct coupler having an input waveguide and an output
waveguide, said output waveguide having a Bragg grating formed thereon, the
method comprising applying a stress gradient to said Bragg grating.

14. A method for compensating for a Bragg wavelength shift in a
grating assisted direct coupler having an input waveguide and an output

waveguide, said output waveguide having a Bragg grating formed thereon, the method comprising varying the periodicity of said Bragg grating.